

REMARKS¹

In the outstanding Office Action, the Examiner rejected claims 1, 3, 5, 7-9, 11, 13, 15, and 16 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Publication No. 07-248467 to Masayuki et al. ("Masayuki") in view of Japanese Patent Publication No. 08-101367 to Yuji ("Yuji"); rejected claims 2 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Masayuki in view of Yuji, and further in view of U.S. Patent No. 5,132,839 to Travis ("Travis"); and rejected claims 4, 6, 12, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Masayuki in view of Yuji, and further in view of U.S. Patent Application Publication No. US 2004/0001139 to Kobayashi ("Kobayashi").

By this amendment, Applicants have amended claims 1 and 9, and have added new claims 17 and 18. Claims 1-18 are now pending in this application.

Applicants respectfully traverse the rejection of claims 1-16 under 35 U.S.C. § 103(a) because a *prima facie* case of obviousness has not been established. To establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), each of three requirements must be met. First, the reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of the three requirements must " be

¹ The Office Action contains statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

found in the prior art, and not be based on applicant's disclosure. " See MPEP § 2143, 8th Ed. (Rev. 5), August, 2006.

In this application, no *prima facie* case of obviousness has been established for at least the reason that the cited references fail to teach or suggest each and every element recited in claims 1-16.

A. Claims 1, 3, 5, 7-9, 11, 13, 15, and 16

Masayuki fails to teach or suggest a combination including "parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels," as recited in claims 1 and 9. The Examiner acknowledges that Masayuki "does not teach each of the pixels to include the sub pixels," and thus Masayuki by necessity fails to teach a combination including "parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels," as recited in claims 1 and 9.

The Examiner cites to Yuji for allegedly providing a teaching of "sub pixels," stating,

Yuji [drawing 2] teaches a three-dimensional image generating device comprising pixels having a layout of sub pixels arranging each of sub pixels having different colors to be adjacent to each other rather than arranging each of sub pixels having same colors to be adjacent to each other.
Office Action, page 3.

Even if the Examiner's statement could be considered correct, Yuji teaches "control pixel part 11 and the control pixel part 12 are constituted so that directions of high transmissivity become opposite directions substantially by changing an orientation direction of a liquid crystal." Yuji, abstract. Yuji, however, provides no teaching or suggestion of "parallax information is assigned to each of the sub pixels in units of

horizontally arranged sub pixels," as recited in claims 1 and 9. Accordingly, Yuji cannot be relied upon to cure the above-noted deficiencies of Masayuki.

Therefore, for at least the reason that Masayuki and Yuji, whether taken alone or in combination, fail to teach or suggest every element recited in claims 1 and 9, a *prima facie* case of obviousness has not been established.

Moreover, Applicants further note that not only does Yuji fail to teach or suggest a combination including each and every element recited in claims 1 and 9, but also teaches away from such a combination. Applicants submit that Yuji, in FIGS. 4, 5, 9, and 18, for example, shows reproducing 3D images from a plurality of small regions arranged in an array, through the use of pinholes, etc. Yuji concerns a problem caused when color filters are arranged in a horizontal direction (i.e., filters having different colors are arranged in a horizontal direction), such that a color shift may occur. This occurs because Yuji teaches providing one parallax information to a group of horizontal color filters. In other words, one parallax information is provided to one pixel composed of three horizontally arranged sub pixels in Yuji. Yuji solves this problem by horizontal stripe arrangement. Yuji describes that the arrangement in which adjacent sub pixels differ in color is rather problematic, and those skilled in the art would not adopt the idea of laying out sub pixels so that adjacent sub pixels differ in color, based on such description of Yuji. Accordingly, Yuji teaches away from a combination including "parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels," as recited in claims 1 and 9, and a *prima facie* case of obviousness has not been established for this reason also.

Accordingly, for at least the reasons presented above, a *prima facie* case of obviousness has not been established with respect to claims 1 and 9. Applicants therefore respectfully request that the Examiner withdraw the rejection of claims 1 and 9 under 35 U.S.C. § 103(a).

Claims 3, 5, 7, 8, 11, 13, 15, and 16 depend from one of claims 1 and 9, and therefore require all of the elements recited in the corresponding independent claim. As discussed above, Masayuki and Yuji fail to teach or suggest a combination including at least “parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels,” as recited in claims 1 and 9, and required by claims 3, 5, 7, 8, 11, 13, 15, and 16. Because Masayuki and Yuji fails to teach or suggest every element recited in claims 1 and 9, that combination of references also fails to teach or suggest every element required by the dependent claims. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 3, 5, 7, 8, 11, 13, 15, and 16 under 35 U.S.C. § 103(a).

B. Claims 2 and 10

Claims 2 and 10, respectively, depend from claims 1 and 9, and therefore require all of the elements recited in claims 1 and 9. As discussed above, Masayuki and Yuji fail to teach or suggest a combination including at least “parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels,” as recited in claims 1 and 9, and required by claims 2 and 10. Travis fails to cure the deficiencies of Masayuki and Yuji.

Travis discloses a structure in which only one parallax image is viewable at a certain time, wherein different parallax images are displayed one after another as time

progresses. With such multiple uses of time, Travis takes advantage of the persistence of vision in human eyes and allows three-dimensional viewing.

In addition, the Examiner alleges that Travis teaches “a three-dimensional display device comprising a backlighting apparatus including a two-dimensional display device, and adopting ray-tracing method to generate a three dimensional image.” Office Action, page 5. Such alleged teachings, even if combinable with Masayuki and Yuji, fail to cure the above-noted deficiencies of Masayuki and Yuji. That is, Masayuki and Yuji also fail to teach or suggest a combination including at least “parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels,” as recited in claims 1 and 9, and required by claims 2 and 10.

For at least the reason that the references, whether taken alone or in combination, fail to teach or suggest every element required by claims 2 and 10, a *prima facie* case of obviousness has not been established. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 2 and 10 under 35 U.S.C. § 103(a).

C. Claims 4, 6, 12, and 14

Claims 4, 6, 12, and 14 depend from one of claims 1 and 9, and therefore require all of the elements recited in the corresponding independent claim. As discussed above, Masayuki and Yuji fail to teach or suggest a combination including at least “parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels,” as recited in claims 1 and 9, and required by claims 4, 6, 12, and 14. Kobayashi fails to cure the deficiencies of Masayuki and Yuji.

Kobayashi discloses, for example, a structure utilizing a pinhole array. However, Kobayashi does not include detailed description on how the pixels of a display are made up. Further, Kobayashi is silent on how parallax information is added to pixels. Accordingly, even if Kobayashi could be combined with Masayuki and Yuii, Kobayashi cannot be relied upon to cure the deficiencies of Masayuki and Yuii. That is, Kobayashi also fails to teach or suggest a combination including at least “parallax information is assigned to each of the sub pixels in units of horizontally arranged sub pixels,” as recited in claims 1 and 9, and required by claims 4, 6, 12, and 14.

For at least the reason that the references, whether taken alone or in combination, fail to teach or suggest every element required by claims 4, 6, 12, and 14, a *prima facie* case of obviousness has not been established. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 4, 6, 12, and 14 under 35 U.S.C. § 103(a).

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: 
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